

IN THE CLAIMS

All pending claims of the present Application are shown below whether or not an amendment has been made.

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1. **(Currently amended)** A system for identifying a subscriber, comprising:
an access server coupled to a plurality of subscribers using a first communication network and further coupled to a second communication network, the access server operable to receive a communication from a particular subscriber using a particular one of a plurality of virtual circuits associated with the first communication network;
a memory coupled to the access server and operable to store path information that identifies a virtual circuit assigned to the particular subscriber; and
a processor coupled to the memory and operable to:

compare the path information and the particular virtual circuit used to receive the communication from the particular subscriber; and

identify the particular subscriber for connection to the second communication network **based on the comparison** ~~based upon the path information and the particular virtual circuit used to receive the communication from the particular subscriber.~~

2. **(Original)** The system of Claim 1, wherein:
the access server comprises one of a plurality of access servers coupled to the processor;
the path information further identifies an access server assigned to the particular subscriber; and
the processor is further operable to identify the particular subscriber based upon the path information and an identifier of the particular access server coupled to the particular subscriber.

3. **(Original)** The system of Claim 1, wherein the access server comprises:
an interface coupled to the particular subscriber using the particular virtual circuit;
and
a controller coupled to the interface and operable to communicate a request
identifying the particular virtual circuit that couples the interface and the particular
subscriber.

4. **(Original)** The system of Claim 3, wherein:
the interface comprises a plurality of network line cards;
the path information further identifies a network line card assigned to the particular
subscriber; and
the processor is further operable to identify the particular subscriber based upon the
path information and an identifier of a particular network line card coupled to the particular
subscriber.

5. **(Original)** The system of Claim 3, wherein the request comprises:
interface information identifying the interface coupled to the particular subscriber;
virtual circuit information identifying the particular virtual circuit; and
access server information identifying the access server.

6. **(Original)** The system of Claim 3, wherein the request comprises a RADIUS
protocol request.

7. **(Original)** The system of Claim 3, wherein the request comprises a trivial file
transfer protocol request.

8. **(Original)** The system of Claim 1, wherein the particular virtual circuit is
associated with the particular subscriber using a virtual path identifier and a virtual channel
identifier.

9. **(Original)** The system of Claim 1, wherein the path information comprises a virtual path identifier and a virtual channel identifier associated with the virtual circuit assigned to the particular subscriber.

10. **(Original)** The system of Claim 1, wherein the access server supports a communication session between the particular subscriber and the second communication network in response to identifying the particular subscriber.

11. **(Currently amended)** A method for identifying a subscriber, comprising:
receiving a communication from a particular one of a plurality of subscribers using a particular one of a plurality of virtual circuits associated with a first communication network;
storing path information that identifies a virtual circuit assigned to the particular subscriber; **and**

comparing the path information and the particular virtual circuit used to receive the communication from the particular subscriber; and

identifying the particular subscriber for connection to a second communication network **based on the comparison** ~~based upon the path information and the particular virtual circuit used to receive the communication from the particular subscriber.~~

12. **(Original)** The method of Claim 11, wherein:

the particular virtual circuit couples the particular subscriber to a particular one of a plurality of access servers;

the path information further identifies an access server assigned to the particular subscriber; and

the step of identifying further comprises identifying the particular subscriber based upon the path information and an identifier of the particular access server coupled to the particular subscriber.

13. **(Original)** The method of Claim 12, wherein the particular access server comprises:

an interface coupled to the particular subscriber using the particular virtual circuit;
and

a controller coupled to the interface.

14. **(Original)** The method of Claim 13, wherein:
the interface comprises a plurality of network line cards;
the path information further identifies a network line card assigned to the particular subscriber; and

the step of identifying further comprises identifying the particular subscriber based upon the path information and an identifier of a particular network line card coupled to the particular subscriber.

15. **(Original)** The method of Claim 11, wherein the particular virtual circuit is associated with the particular subscriber using a virtual path identifier and a virtual channel identifier.

16. **(Original)** The method of Claim 11, wherein the path information comprises a virtual path identifier and a virtual channel identifier associated with the virtual circuit assigned to the particular subscriber.

17. **(Original)** The method of Claim 11, further comprising supporting a communication session between the particular subscriber and the second communication network in response to identifying the particular subscriber.

18. **(Currently amended)** An information server, comprising:
a memory operable to store path information for a plurality of subscribers coupled to an access server using a plurality of virtual circuits associated with a first communication network, the path information identifying a virtual circuit assigned to a particular subscriber;
and

a processor coupled to the memory and operable to:

compare the path information and a particular virtual circuit that couples the particular subscriber to the access server; and

identify a particular subscriber for connection to a second communication network based on the comparison ~~based upon the path information and a particular virtual circuit that couples the particular subscriber to the access server.~~

19. **(Original)** The information server of Claim 18, wherein:

the path information further identifies an access server assigned to the particular subscriber; and

the processor is further operable to identify the particular subscriber based upon the path information and an identifier of the access server coupled to the particular subscriber.

20. **(Original)** The information server of Claim 18, wherein:

the path information further identifies a network line card of the access server assigned to the particular subscriber; and

the processor is further operable to identify the particular subscriber based upon the path information and an identifier of the network line card.

21. **(Original)** The information server of Claim 18, wherein the processor identifies the subscriber in response to receiving a request comprising:

interface information identifying an interface of the access server coupled to the particular subscriber;

virtual circuit information identifying the particular virtual circuit; and

access server information identifying the access server.

22. **(Original)** The information server of Claim 21, wherein the request comprises a RADIUS protocol request.

23. **(Original)** The information server of Claim 21, wherein the request comprises a trivial file transfer protocol request.

24. **(Original)** The information server of Claim 18, wherein the virtual circuit that couples the particular subscriber with the access server is associated with the particular subscriber using a virtual path identifier and a virtual channel identifier.

25. **(Original)** The information server of Claim 18, wherein the path information comprises a virtual path identifier and a virtual channel identifier associated with the virtual circuit assigned to the particular subscriber.

26. **(Currently amended)** A method for identifying a subscriber, comprising:
receiving a request identifying a particular one of a plurality of virtual circuits associated with a first communication network, wherein the particular virtual circuit is used by an access server to receive a communication from a particular one of a plurality of subscribers;

storing path information that identifies a virtual circuit assigned to the particular subscriber; **and**

comparing the path information and the particular virtual circuit used by the access server to receive the communication from the particular subscriber; and

identifying the particular subscriber for connection to a second communication network based on the comparison ~~based upon the path information and the particular virtual circuit used by the access server to receive the communication from the particular subscriber.~~

27. **(Original)** The method of Claim 26, wherein:

the particular virtual circuit couples the particular subscriber to a particular one of a plurality of access servers;

the path information further identifies an access server assigned to the particular subscriber; and

the step of identifying further comprises identifying the particular subscriber based upon the path information and an identifier of the particular access server coupled to the particular subscriber.

28. **(Original)** The method of Claim 27, wherein the particular access server comprises:

an interface coupled to the particular subscriber using the particular virtual circuit;
and

a controller coupled to the interface.

29. **(Original)** The method of Claim 28, wherein:
the interface comprises a plurality of network line cards;
the path information further identifies a network line card assigned to the particular subscriber; and

the step of identifying further comprises identifying the particular subscriber based upon the path information and an identifier of a particular network line card coupled to the particular subscriber.

30. **(Original)** The method of Claim 26, wherein the particular virtual circuit is associated with the particular subscriber using a virtual path identifier and a virtual channel identifier.

31. **(Original)** The method of Claim 26, wherein the path information comprises a virtual path identifier and a virtual channel identifier associated with the virtual circuit assigned to the particular subscriber.

32. **(Original)** An access server, comprising:

an interface coupled to a plurality of subscribers using a first communication network and operable to receive a communication from a particular subscriber using a particular one of a plurality of virtual circuits associated with the first communication network;

a controller coupled to the interface and operable to communicate a request to an information server for identifying the particular subscriber, the request identifying the particular virtual circuit used to receive the communication from the particular subscriber; and

a route processor coupled to the controller and operable to support a communication session between the particular subscriber and a second communication network in response to identifying the particular subscriber.

33. **(Original)** The access server of Claim 32, wherein the request comprises:

interface information identifying the interface coupled to the particular subscriber;

virtual circuit information identifying the particular virtual circuit; and

access server information identifying the access server.

34. **(Original)** The access server of Claim 32, wherein the request comprises a RADIUS protocol request.

35. **(Original)** The access server of Claim 32, wherein the request comprises a trivial file transfer protocol request.

36. **(Original)** A method for identifying a subscriber, comprising:
receiving a communication from a particular one of a plurality of subscribers using a particular one of a plurality of virtual circuits associated with a first communication network;
communicating a request to an information server for identifying the particular subscriber, the request identifying the particular virtual circuit used to receive the communication from the particular subscriber; and
supporting a communication session between the particular subscriber and a second communication network in response to identifying the particular subscriber.

37. **(Original)** The method of Claim 36, wherein the request comprises:
interface information identifying an interface of an access server coupled to the particular subscriber;
virtual circuit information identifying the particular virtual circuit; and
access server information identifying the access server.

38. **(Previously presented)** The method of Claim 36, wherein the request comprises a RADIUS protocol request.

39. **(Previously presented)** The method of Claim 36, wherein the request comprises a trivial file transfer protocol request.

40. **(Currently amended)** A computer program for identifying a subscriber, the program encoded on a computer-readable medium and operable to execute the following steps:

receiving a communication from a particular one of a plurality of subscribers using a particular one of a plurality of virtual circuits associated with a first communication network;

storing path information that identifies a virtual circuit assigned to the particular subscriber; **and**

comparing the path information and the particular virtual circuit used to receive the communication from the particular subscriber; and

identifying the particular subscriber for connection to a second communication network **based on the comparison** ~~based upon the path information and the particular virtual circuit used to receive the communication from the particular subscriber.~~

41. **(Original)** The computer program of Claim 40, wherein:
the particular virtual circuit couples the particular subscriber to a particular one of a plurality of access servers;

the path information further identifies an access server assigned to the particular subscriber; **and**

the step of identifying further comprises identifying the particular subscriber based upon the path information and an identifier of the particular access server coupled to the particular subscriber.

42. **(Original)** The computer program of Claim 41, wherein the particular access server comprises:

an interface coupled to the particular subscriber using the particular virtual circuit; **and**

a controller coupled to the interface.

43. **(Original)** The computer program of Claim 42, wherein:
the interface comprises a plurality of network line cards;
the path information further identifies a network line card assigned to the particular subscriber; and

the step of identifying further comprises identifying the particular subscriber based upon the path information and an identifier of a particular network line card coupled to the particular subscriber.

44. **(Original)** The computer program of Claim 40, wherein the particular virtual circuit is associated with the particular subscriber using a virtual path identifier and a virtual channel identifier.

45. **(Original)** The computer program of Claim 40, wherein the path information comprises a virtual path identifier and a virtual channel identifier associated with the virtual circuit assigned to the particular subscriber.

46. **(Original)** The computer program of Claim 40, further comprising supporting a communication session between the particular subscriber and the second communication network in response to identifying the particular subscriber.